

U2AF1L3/35 (D-4): sc-514459

BACKGROUND

The smallest of the human chromosomes, 21, makes up about 1.5% of the human genome. Chromosome 21 contains nearly 300 genes and 47 million base pairs. Down syndrome, also known as trisomy 21, is the disease most commonly associated with chromosome 21. Alzheimer's disease, Jervell and Lange-Nielsen syndrome and amyotrophic lateral sclerosis are also associated with chromosome 21. Translocations are found to occur between chromosome 21 and 8, and chromosome 21 and 12 in certain leukemias.

REFERENCES

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2. Tyson, J., et al. 1997. IsK and KvLQT1: mutation in either of the two subunits of the slow component of the delayed rectifier potassium channel can cause Jervell and Lange-Nielsen syndrome. *Hum. Mol. Genet.* 6: 2179-2185.
3. Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. *Proc. Natl. Acad. Sci. USA* 97: 206-211.
4. Mao, R., et al. 2005. Primary and secondary transcriptional effects in the developing human Down syndrome brain and heart. *Genome Biol.* 6: R107.
5. Robakis, N.K. 2006. The discovery and mapping to chromosome 21 of the Alzheimer's amyloid gene: history revised. *J. Alzheimers Dis.* 10: 453-455.
6. Sun, X., et al. 2006. BACE2, as a novel APP q-secretase, is not responsible for the pathogenesis of Alzheimer's disease in Down syndrome. *FASEB J.* 20: 1369-1376.
7. Ait Yahya-Graison, E., et al. 2007. Classification of human chromosome 21 gene-expression variations in Down syndrome: impact on disease phenotypes. *Am. J. Hum. Genet.* 81: 475-491.

CHROMOSOMAL LOCATION

Genetic locus: U2AF1 (human) mapping to 21q22.3, U2AF1L4 (human) mapping to 19q13.12; U2af1 (mouse) mapping to 17 B1, U2af114 (mouse) mapping to 7 B1.

SOURCE

U2AF1L3/35 (D-4) is a mouse monoclonal antibody raised against amino acids 36-186 mapping within an internal region of U2AF35 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

U2AF1L3/35 (D-4) is available conjugated to agarose (sc-514459 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514459 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514459 PE), fluorescein (sc-514459 FITC), Alexa Fluor[®] 488 (sc-514459 AF488), Alexa Fluor[®] 546 (sc-514459 AF546), Alexa Fluor[®] 594 (sc-514459 AF594) or Alexa Fluor[®] 647 (sc-514459 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514459 AF680) or Alexa Fluor[®] 790 (sc-514459 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

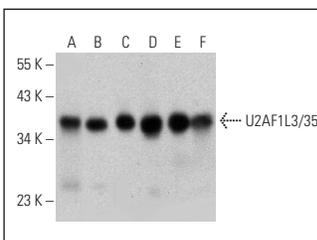
U2AF1L3/35 (D-4) is recommended for detection of U2AF1L3 and U2AF35 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Positive Controls: HeLa whole cell lysate: sc-2200, HEK293 whole cell lysate: sc-45136 or NAMALWA cell lysate: sc-2234.

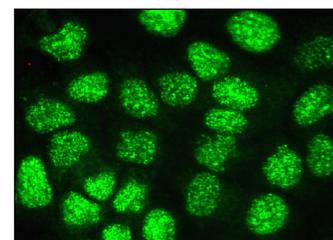
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



U2AF1L3/35 (D-4): sc-514459. Western blot analysis of U2AF1L3/35 expression in HEK293 (A), HeLa (B) and NAMALWA (C) whole cell lysates and MOLT-4 (D), Jurkat (E) and IMR-32 (F) nuclear extracts.



U2AF1L3/35 (D-4): sc-514459. Immunofluorescence staining of formalin-fixed A-431 cells showing nuclear localization.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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